



Space Invaders

ARE YOU READY TO PLAY?

Coded by:

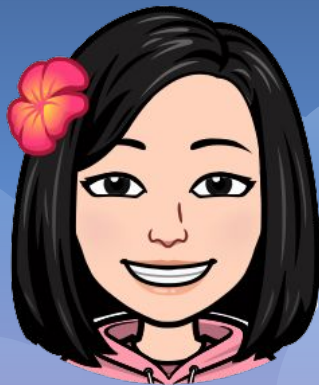
CodeVaders



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Rachel



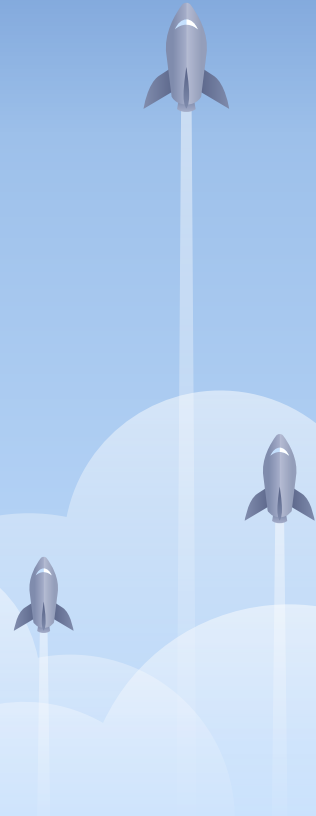
Shahad



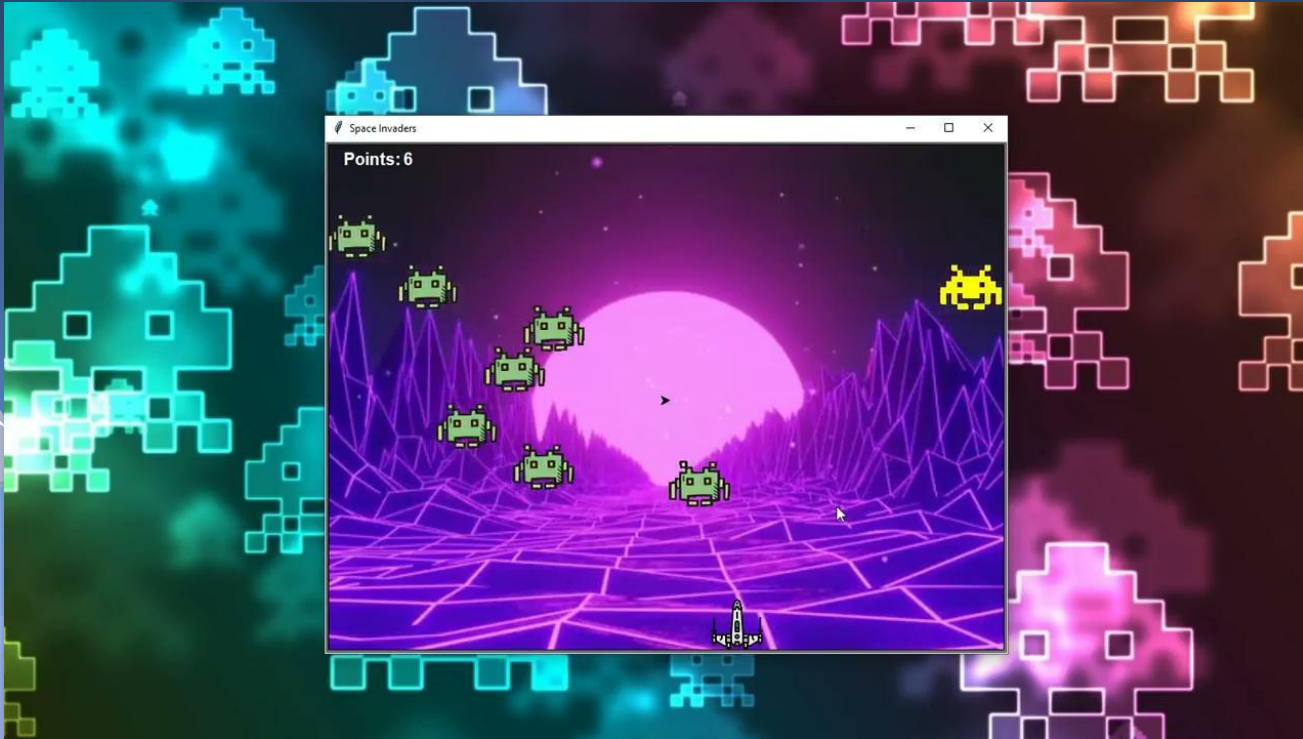
How To Play:

Objective: Hit as many aliens as you can before they reach you!

- Use the left and right arrow keys to move
- Use spacebar to shoot a bullet
- Yellow aliens might pop up! Capture them with your bullet to become ***SPEEDY***
- Extra rule: Once you gain a multiple of 8 points (8, 16, 24...), the aliens' speed will increase.



Demo:



Loud:

<https://drive.google.com/file/d/1ap4hPsZLDn7YW8cI9qkjpQSYdg0IbxFL/view?usp=sharing>

<https://drive.google.com/file/d/1kkON7P98EjPY1P900qPIABu1vCW0g83/view?usp=sharing>

Tricky Code Snippet

```
# function that the button executes
def start_game(x, y) -> None: # -> None means function will not return anything
    if button_x <= x <= (button_x + button_length):
        if button_y <= y <= (button_y + button_width):
            global start
            start = True
            screen.clear()
            screen.bgpic("neon_background.png")

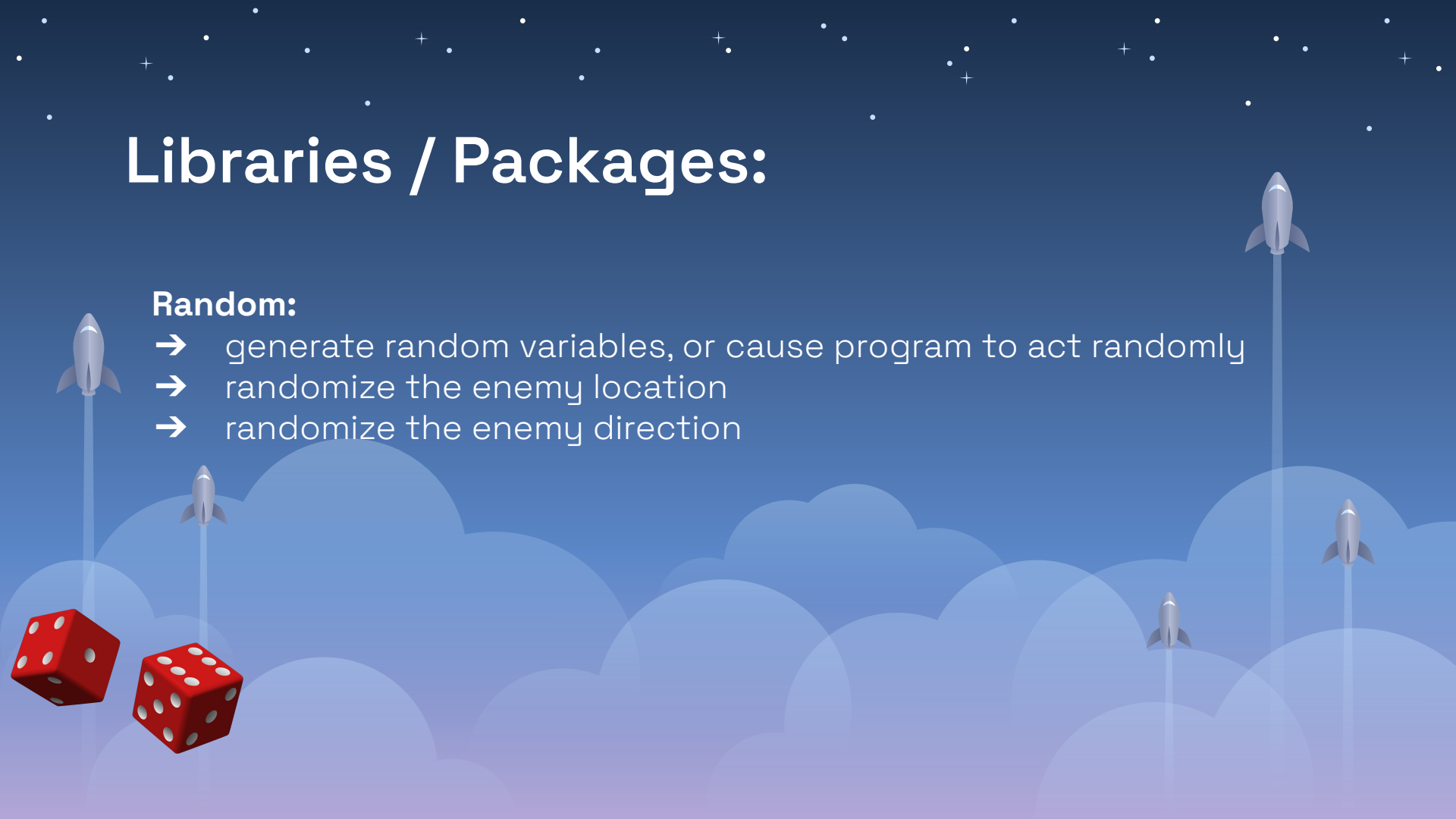
# making the button 'clickable'
screen.onclick(start_game)
```

- > check if the user's click is within the boundaries of the button
- > change the global variable start to True so the program breaks out of the while loop; a new while loop runs
- > clear the screen and set the background picture to the game's background
- > listens to the user's input (where does the user click on the screen?)

Libraries / Packages:

Random:

- generate random variables, or cause program to act randomly
- randomize the enemy location
- randomize the enemy direction



Libraries / Packages:

Pygame:

- used to create video games with Python
- include background music



Libraries / Packages:

Time:

- show time in your code, or measuring time during the code
- end program after 5 seconds



Libraries / Packages:

Winsound:

- allows sound-playing for windows platforms
- add shooting, explosion, and losing sound effects





Thank You For Your Attention!

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